

## ABSTRACT

[0090] The present invention provides methods and compositions for detecting and analyzing clonal T-cell receptor (TCR) gene rearrangement using temporal temperature gradient gel electrophoresis (TTGE), which employs a gradual and uniform increase in the temperature of a constant denaturing gel to resolve different DNA molecules based on base pair composition. The present invention also provides methods and compositions for providing appropriate DNA migration markers for TTGE analysis.